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MORBIDITY AND MORTALITY WEEKLY REPORT



## Adverse Reactions Associated with Midline Catheters — United States, 1992–1995

The midline catheter is a peripherally inserted 6–8-inch catheter that may be used in patients requiring intermediate duration (i.e., several weeks) of physiologically compatible intravenous (IV) therapy. Unlike conventional short peripheral IV catheters, the midline catheter does not require changes every 48–72 hours.* Midline catheters can be inserted at the bedside by a trained health-care worker, in contrast to subclavian, jugular, or femoral central venous catheters, which require insertion by a physician (often in an operating or procedure room) and usually are associated with more serious complications. Since 1990 (*1*), the Food and Drug Administration (FDA) has received reports of acute hypersensitivity-like reactions temporally associated with insertion of midline catheters made from Aquavene® (Landmark®, Menlo Care, Menlo Park, California)†, an elastomeric hydrogel material that becomes hydrated and expands after catheter insertion (FDA, unpublished data, 1995; *1*). This report describes four episodes of such reactions during 1992–1995, including one in a patient in a home-health–care setting (patient 1) and three among patients at a large university-affiliated hospital (patients 2–4).

**Patient 1.** A 31-year-old woman in the first trimester of pregnancy required home hydration therapy for management of hyperemesis gravidarum. She had received IV lactated Ringers solution at home beginning March 21, 1992, using Teflon® catheters without complications. On April 24, 1992, a Landmark® catheter was placed because of the long-term nature of the therapy and diminished peripheral access. On flushing the catheter with 5 mL of 0.9% saline, the patient complained of chest pain, shortness of breath, and a sense of "impending doom." Facial flushing and urticaria were noted on the upper chest. In response to the symptom onset, the catheter was immediately removed, and the symptoms resolved within minutes. The patient remained hemodynamically stable and was treated with diphenhydramine. Subsequently, she received hydration therapy using Teflon® catheters without further complications.

**Patient 2.** A 35-year-old woman was admitted to the hospital in January 1994 because of complications from a bile leak following a cholecystectomy. Fourteen days

*60 FR 49,978–50,006.

†Use of trade names and commercial sources is for identification only and does not imply endorsement by the Public Health Service or the U.S. Department of Health and Human Services.

*Midline Catheters — Continued*

after admission, a Landmark® midline catheter was inserted into her right antecubital vein. Within 1–2 minutes of inserting the catheter and flushing with 0.9% saline, the patient complained of back pain and shortness of breath, and her skin became flushed; no IV medication had been administered before onset of symptoms. The catheter was removed immediately, and all symptoms resolved within 5–10 minutes without further intervention. The patient had no known allergies and had had other types of IV catheters inserted before and after this event without similar complications.

**Patient 3.** A 75-year-old woman with no known allergies was admitted to the hospital with endocarditis in February 1994 and had a Landmark® midline catheter placed in a right antecubital vein 13 days after admission. Following flushing with 0.9% saline, maintenance IV fluid (0.9% saline) was begun; 20–30 minutes later, but before administration of any IV medications, she complained of chest tightness. She was noted to be "shaking profusely" and confused, and her skin was mottled. IV hydrocortisone, diphenhydramine and meperidine were administered, and the catheter was removed. Her symptoms resolved within 5–10 minutes of catheter removal. Blood and urine cultures were negative. IV catheters made by other manufacturers have been inserted in this patient before and after this event without similar complications.

**Patient 4.** A 14-year-old girl with cystic fibrosis and no known allergies was admitted to the hospital in July 1994 because of an exacerbation of her underlying respiratory condition. She previously had a midline catheter placed while at home without complications; the manufacturer of that catheter is unknown. The day after admission, a Landmark® midline catheter was placed in her left antecubital vein. Within 1–2 minutes after insertion and flushing with 0.9% saline, and as maintenance IV fluid (5% dextrose in 0.45% saline) was started, she became nauseated and complained of blurred vision and shortness of breath. Her skin was flushed with central cyanosis. She was diaphoretic, gasping, and lost consciousness. The catheter was removed, and she regained consciousness and her other symptoms resolved within 5–10 minutes after removing the catheter without any other interventions. Since the episode, IV catheters made by other manufacturers have been inserted in this patient without similar complications.

**Other reports.** From April 1990 through July 1995, a total of 72 adverse reactions similar to those described in this report were reported to FDA (FDA, unpublished data, 1995; *1*). At the hospital involved in this report, 292 Landmark® midline catheters were inserted from January 1993 through September 1994; the three episodes of acute hypersensitivity-like reactions occurred during this period. In addition, 70,838 other types of catheters made by other manufacturers were inserted at that hospital during this period without adverse effects.

*Reported by: L Mermel, DO, SM Tow, Dept of Medicine and Dept of Nursing, Rhode Island Hospital, Providence; M Mahoney, Rhode Island Home Therapeutics, East Providence. Hospital Infections Program, National Center for Infectious Diseases, CDC.*

**Editorial Note:** The cause of the adverse reactions temporally associated with the insertion of midline IV catheters described in this report is unknown. Acute hypersensitivity reactions associated with inserting or flushing IV catheters is rarely reported. The acute onset of flushing in the patients described in this series of case reports suggests several possibilities, including hypersensitivity; the common, temporally associated exposures among the four patients were the insertion of a Landmark®

*Midline Catheters — Continued*

midline catheter and flushing of the catheter with 0.9% sterile saline. Possible sources for reactions include catheter components, intrinsic or extrinsic material on the inside or outside of the catheter, residual material associated with catheter sterilization or packaging, injectable fluids and medications, anatomic location of the catheter insertion, or insertion technique. However, none of these patients had received any IV medication before the reaction. Although all the patients had flushes with 0.9% saline, the type of flushes and IV fluids that they had received were the same as those that other patients had received or the same as those that they had received with other catheters before and after the reactions without problems; however, whether these other catheters were midline catheters is unknown.

The Landmark® catheter is the only midline catheter manufactured from Aquavene®. Latex, a material previously known to have caused hypersensitivity reactions (*2,3*), is not a component of the catheter. Reported reactions often have occurred during flushing, suggesting the cause of the reactions may be extrinsic to the catheter and is dislodged during flushing. Midline catheters are sterilized by irradiation, which excludes the possibility of residues from chemical disinfectants such as formaldehyde or ethylene oxide—compounds associated with hypersensitivity reactions (*4,5*). Allergens may adhere to the wall of the catheter or have a threshold that must be reached, as suggested by the delayed onset in the acute hypersensitivity-like reaction 20–30 minutes after insertion in one patient (patient 3)—the approximate time required for the catheter to become completely hydrated and the lumen partially opened. In addition, the hydration process may facilitate the release of the causative agent.

Because of the rare occurrence of acute hypersensitivity reactions associated with the insertion or flushing of IV catheters, the association between these reactions and one or more catheters may be difficult to recognize at any single institution and may depend on the frequency of use of the catheter. Further investigation is necessary to determine the cause of the reactions, the prevalence of such reactions, and whether these reactions occur with catheters made of other materials (*1,6,7*). To determine whether these reactions are associated with the midline catheter, the manufacturer is working with FDA on further studies. Health-care workers who observe reactions associated with IV devices are encouraged to report their findings to the FDA Medwatch Program (telephone [800] 332-1088) and through their state health department to the CDC Hospital Infections Program, National Center for Infectious Diseases (telephone [404] 639-6413).

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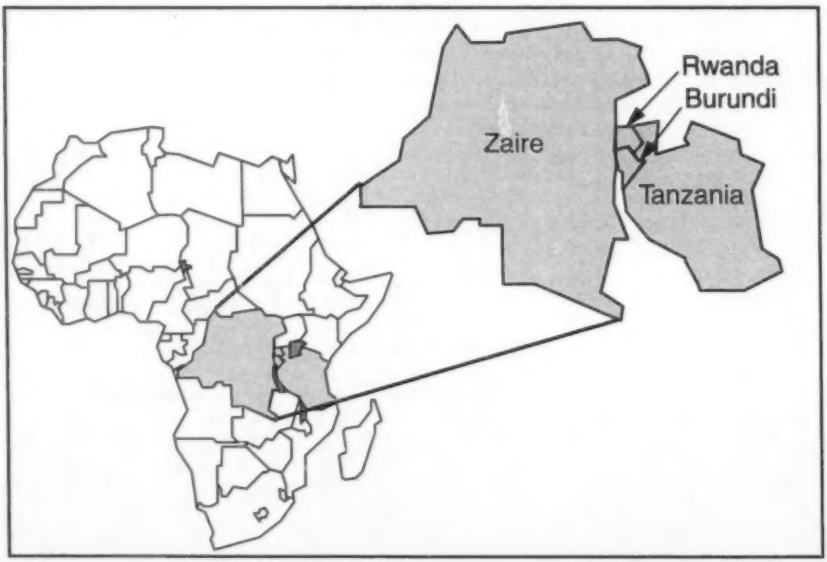
## Morbidity and Mortality Surveillance in Rwandan Refugees — Burundi and Zaire, 1994

In April 1994, resumption of a longstanding conflict between the Hutus and Tutsis—the two major ethnic groups in the central African countries of Burundi and Zaire—resulted in civil war and mass genocide in Rwanda. An estimated 63,000 (primarily Tutsi) refugees subsequently moved from Rwanda into northern Burundi, and 500,000 refugees fled to Tanzania (Figure 1). In early July 1994, as armed strife subsided, many Tutsis returned home to Rwanda, and an estimated 1 million Rwandan Hutus fled to Zaire, and 170,000 fled to Burundi. To monitor the health status of the refugees, the Office of the United Nations High Commissioner for Refugees (UNHCR) and nongovernmental organizations (NGOs) working in refugee camps in both countries established systems for rapid surveillance of morbidity and mortality. This report presents the findings of these systems during May–September 1994 (the period of the most intensive population migration) and indicates that mortality was high among refugees in camps in both countries.

### Burundi

In May 1994, morbidity surveillance was initiated by using health-unit data collected by NGOs in seven refugee camps in northern Burundi. Denominator data were derived from UNHCR estimates used to calculate quantities of rations. Clinical case definitions for major causes of morbidity (bloody diarrhea, nonbloody diarrhea, cholera, malaria, acute respiratory infections [ARIs], measles, meningitis, trauma, and other conditions) had been developed previously by the Ministry of Health in Burundi

**FIGURE 1. Location of Rwanda and countries to which Rwandan refugees fled — central Africa, 1994**



*Rwandan Refugees — Continued*

(*1*). Mortality data were collected from three sources: a camp grave watcher; home-health visitors who interviewed families of deceased persons; and the camp health unit, which distributed free funeral shrouds to the families of deceased persons.

In May, daily crude mortality rates (CMR) varied substantially among the camps, ranging from zero to eight deaths per 10,000 population per day. By July 1994, the CMR had declined to zero to two deaths per 10,000 per day. The most commonly reported causes of death were diarrheal diseases, and the major causes of morbidity were malaria, bloody diarrhea, and ARI.

An outbreak of nonbloody diarrhea in one camp in Ngozi had a peak incidence of 980 cases per 100,000 per week; *Vibrio cholerae* O1, biotype El Tor, serotype Ogawa, was isolated from stool samples obtained from a sample of affected persons. Interventions included improvements in the camp water system (e.g., chlorination) and intensive health education and latrine-maintenance efforts; the incidence of new cases declined to 350 cases per 100,000 per week within 5 weeks.

During May, the approximately 26,000 persons living in camps in Ngozi and Kayanza were vaccinated against meningococcal meningitis after suspected cases were reported during May 1–14. The average weekly rate (54 cases per 100,000 per week) had substantially exceeded the epidemic threshold rate (≥15 cases per 100,000 per week) (*2*). *Neisseria meningitidis,* serotype A, subsequently was isolated from cerebrospinal fluid samples obtained from patients.

**Zaire**

In August 1994, morbidity and mortality surveillance was initiated by using information collected in NGO clinics in the three primary refugee camps in eastern Zaire and the town of Goma. Case definitions for six major causes of morbidity and mortality (bloody diarrhea, nonbloody diarrhea, malaria, measles, meningitis, and ARI) were standardized among all health agencies working in the camps. The numbers of deaths occurring in the camps were obtained from three sources: a body-collection system that recovered bodies along the roadside using trucks, tallies of bodies buried in mass graves, and health agency reports of deaths occurring in camp hospitals. Initially, a range of denominators (600,000–800,000) was used because no accurate records were available of the number of refugees in the camps; however, in September, UNHCR determined the number of refugees to be 600,000. Based on these denominator data, the CMR ranged from 34.1 to 54.5 deaths per 10,000 per day during August 8–21 (using the denominators of 600,000–800,000), then decreased to 2.5 per 10,000 per day on September 29 (using the denominator of 600,000) and to 0.2 per 10,000 per day on November 30 (using the denominator of 600,000).

The highest rates of illness and death were associated with an epidemic of diarrhea first documented at NGO clinics; subsequently, *V. cholerae* O1, biotype El Tor, serotype Ogawa, was isolated from stool samples obtained from patients. From July 21 (when sentinel surveillance for diarrheal disease was initiated) through August 14, approximately 62,500 cases were reported from camp health centers (rate*: 31.2–41.7 cases per 10,000 per day). Camp surveys and clinic reports suggested that approximately 37,500 (60%) of these cases (watery diarrhea) resulted from infection with *V. cholerae.* However, by August 4, the incidence of bloody diarrhea exceeded watery diarrhea, and infection with *Shigella dysenteriae* type 1 was confirmed in persons

*Rates were calculated using the denominators 600,000–800,000.

*Rwandan Refugees — Continued*

with bloody diarrhea. During August 8–14, a total of 15,543 cases of bloody diarrhea (rate*: 27.8–37.0 cases per 10,000 per day) were reported. Findings of a survey in one camp indicated that 47% of persons with fatal diarrheal disease had never visited a health-care facility. Comparison of death rates calculated using data from the surveillance system and the numbers of bodies collected suggested that >90% of deaths from all causes occurred outside health-care facilities.

From August 14 through September 11, the daily incidence of ARIs among persons in all of these camps ranged from 5.6 to 7.4 cases per 10,000 persons*. The incidence of malaria could not be calculated because cases were not laboratory confirmed and were included in the category "fevers of unknown origin"; however, the incidence of fevers of unknown origin ranged from 15.8 to 21.0 cases per 10,000 persons*. Although the reported incidence of measles was low (201 cases) during this period, the United Nation's Children's Fund (UNICEF) initiated a measles vaccination campaign aimed at all children aged <5 years—estimated to be 25% of the total population. In addition, because 83 cases of meningococcal meningitis type A were confirmed during August 1–16 and exceeded World Health Organization (WHO) recommended threshold limits, a vaccination campaign was conducted during late August and early September.

*Reported by: United Nations High Commissioner for Refugees, Geneva, Switzerland. Ministry of Health, Zaire. World Health Organization, Bujumbura, Burundi. Div of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion; Div of HIV/AIDS Prevention, National Center for Prevention Svcs; International Health Program Office, CDC.*

**Editorial Note:** Death rates among refugee populations may be substantially increased when exodus is rapid and large numbers of persons are displaced. During nonemergency situations, the daily CMR in developing countries is 0.5 per 10,000 persons (*3*). The death rates in Zaire (34–54 deaths per 10,000 per day*) were among the highest to be documented during recent refugee emergencies, while those among refugees in Burundi were similar to those recorded in border camps in Thailand in 1979 (10.6 per 10,000 per day), in Somalia in 1980 (10.1 per 10,000 per day), and in Ethiopia in 1991 (4.7 per 10,000 per day) (*3*). In Zaire, a high proportion (initially 90%) of deaths occurred outside health-care facilities, indicating either that health-care services were not accessible to a high proportion of severely ill persons or services at clinic sites were exceeded by demands. This finding emphasizes the need for establishing community rehydration programs at the beginning of the emergency phase.

The differences in rates of illness and death among refugees in Burundi and Zaire probably reflected three factors: 1) the daily number of camp arrivals, 2) the total camp size, and 3) the magnitude and speed of spread of the outbreaks of cholera. In particular, in Burundi, 60,000 refugees arrived during the first wave in April and 170,000 arrived during July; in comparison, approximately 1 million refugees arrived in Zaire during a 5-day period. These rapid influxes of large numbers of persons facilitated transmission of infectious diseases and hindered establishment of emergency health-care services in both areas.

The surveillance systems in Burundi and Zaire assisted in the identification of outbreaks, implementation and assessment of interventions (e.g., control of diarrheal diseases through the provision of clean water and sanitation systems, distribution of soap, and training of clinical staff in aggressive rehydration therapy), and recognition

*Rates were calculated using the denominators 600,000–800,000.

*Rwandan Refugees — Continued*

of the need for increased health-care services. The experiences in both countries underscore the needs for simplicity and for targeting surveillance efforts during the emergency phase in refugee camps.

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## Screening for Colorectal Cancer — United States, 1992–1993, and New Guidelines

Colorectal cancer is the third most commonly diagnosed cancer for both men and women in the United States and is the second leading cause of cancer-related deaths (*1*). During 1996, approximately 133,500 new cases of colorectal cancer will be diagnosed, and 54,900 persons will die from the disease (*1*). Recent evidence of the efficacy of colorectal cancer screening to reduce mortality was reviewed by the U.S. Preventive Services Task Force (USPSTF), an independent expert advisory panel to the Public Health Service (*2*). The revised USPSTF recommendations on cancer screening suggest that the risk for colorectal cancer-related mortality can be reduced by the use of specific screening tests (i.e., annual fecal occult blood testing [FOBT] and/or periodic flexible sigmoidoscopy for persons aged ≥50 years)*. To estimate the prevalence of colorectal cancer screening practices, CDC analyzed data on use of colorectal cancer screening methods from the 1992 and 1993 Behavioral Risk Factor Surveillance System (BRFSS). This report summarizes the results of that analysis, which documents low rates of use of colorectal cancer screening and underscores the need for efforts to increase screening.

In 1993, a total of 49 states and the District of Columbia participated in the BRFSS, a population-based, random-digit–dialed telephone survey of the U.S. civilian, noninstitutionalized population. A total of 38,063 respondents aged ≥50 years were asked whether they ever had had a digital rectal examination (DRE) or a proctoscopic examination and when the last examination was performed. Data were weighted and aggregated, and composite estimates and standard errors were calculated using SUDAAN. Data are presented for the proportion of respondents reporting a DRE during the year preceding the interview and the proportion reporting proctosigmoidoscopy during the 5 years preceding the interview for selected groups (i.e., sex, race, age, annual household income, and education level). Race-specific data are presented because screening rates and death rates previously have varied by these categories; data are presented only for whites and blacks because numbers for other racial groups were too small to calculate precise estimates.

*Printed copies of *Guide to Clinical Preventive Services, 2nd Edition*, are available from the Superintendent of Documents, U.S. Government Printing Office, telephone (202) 512-1800 (stock no. 017-001-00525-8). The single-copy price is $35, including shipping. The guide can be accessed on the Internet beginning March 1996 at either http://text.nlm.nih.gov or http://odphp.osophs.dhhs.gov.

*Colorectal Cancer — Continued*

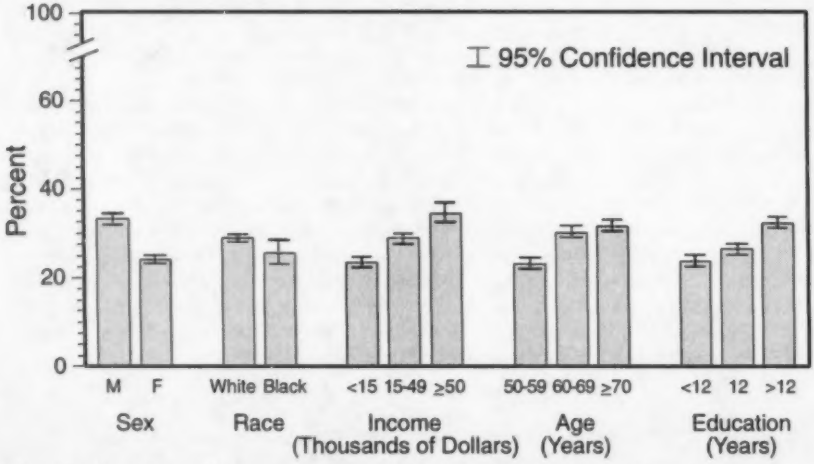
Overall, 43% of respondents reported a DRE during the preceding year, and 28% reported a proctosigmoidoscopy during the preceding 5 years. Men were more likely than women to have had a proctosigmoidoscopy (33% and 24%, respectively) and to have had a DRE (47% and 40%, respectively) (Figures 1 and 2). Whites were more likely than blacks to have had a proctosigmoidoscopy (29% and 26%, respectively) and to have had a DRE (44% and 39%, respectively). The proportion of respondents reporting proctosigmoidoscopy increased with age, from 23% of persons aged 50–59 years to 32% of persons aged ≥70 years.

For both DRE and proctosigmoidoscopy, the proportion of respondents tested was directly related to income and level of education. Among those earning <$15,000 annually, 35% reported a DRE, and 24% reported a proctosigmoidoscopy; among those earning >$50,000 annually, 55% reported a DRE, and 35% reported a proctosigmoidoscopy. Among those with <12 years of education, 37% reported a DRE, and 24% reported a proctosigmoidoscopy; among those with a college education, 49% reported a DRE, and 32% reported a proctosigmoidoscopy. Although there were differences in race-specific crude rates, these rates were similar when analyzed by education and income categories.

In 1992, four states (California, Delaware, New Jersey, and New York) used a BRFSS module that included questions about FOBT. In these states, the overall proportion of persons reporting having had an FOBT during the year preceding the interview was 34% for men and 29% for women.

*Reported by: State Behavioral Risk Factor Surveillance System coordinators. Office of Disease Prevention and Health Promotion, US Dept of Health and Human Svcs. Epidemiology and Statistics Br, Div of Cancer Prevention and Control, National Center for Chronic Disease Prevention and Health Promotion, CDC.*

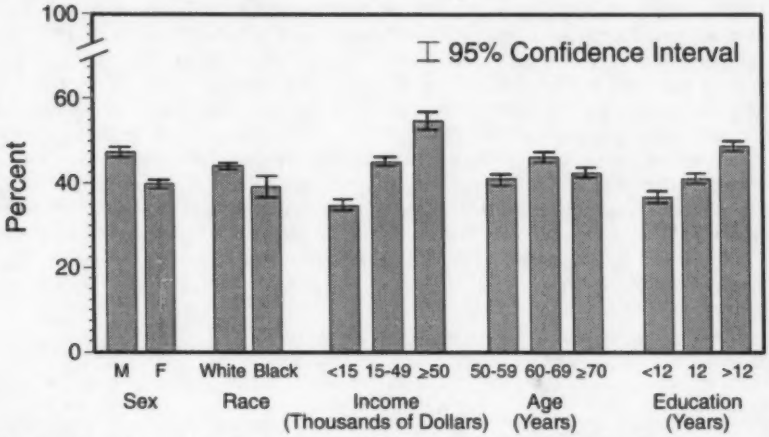
**FIGURE 1. Percentage of respondents aged ≥50 years who reported having had a proctosigmoidoscopy during the preceding 5 years, by sex, race*, annual household income, age group, and education — United States, Behavioral Risk Factor Surveillance System, 1993**




*Numbers for other racial groups were too small to calculate precise estimates.

*Colorectal Cancer — Continued*

**FIGURE 2. Percentage of respondents aged ≥50 years who reported having had a digital rectal examination during the preceding year, by sex, race*, annual household income, age, and education — United States, Behavioral Risk Factor Surveillance System, 1993**




*Numbers for other racial groups were too small to calculate precise estimates.

**Editorial Note:** Well-established risk factors for colorectal cancer include older age, male sex, inflammatory bowel disease, certain hereditary conditions (e.g., familial polyposis), and family history of colorectal cancer. In addition, dietary fat, alcohol, sedentary lifestyle, and obesity are potential risk factors (*3*). Because the well-established risk factors are not amenable to change, the primary strategy for preventing colorectal cancer deaths is to detect and remove precancerous polyps or to detect and treat cancer in its earliest stages. The efficacy of colorectal cancer screening by FOBT and sigmoidoscopy as means for reducing colorectal cancer deaths has been well documented (*4–6*).

The findings in this report document low overall rates of use of colorectal cancer screening in the United States. DRE was the most commonly used test for colorectal cancer, probably reflecting its practical incorporation into routine physical examinations. However, DRE can detect tumors only in the distal 10 cm of the colon, and the efficacy of DRE has not been documented. Although FOBT data were available only from four states, because the use of DRE and proctosigmoidoscopy in these states was not substantially different from the nationwide average, the FOBT data may be representative of the national average. The BRFSS questionnaire does not distinguish between tests conducted for diagnosis and for screening. However, because proctosigmoidoscopies are more likely to be used for diagnosis than FOBT and DRE (41% versus 24% and 20%, respectively) (*7*), proctosigmoidoscopy may be the least used screening test for colorectal cancer.

The findings in this report are subject to at least two limitations. First, because the BRFSS is a telephone survey, persons without telephones are not represented.

*Colorectal Cancer — Continued*

Therefore, because of the association between absence of residential telephones and lower socioeconomic status, persons without telephones may be less likely to have been screened and testing rates may have been overestimated. Second, the BRFSS findings are based on self-reports and have not been validated.

The findings in this report document the need for efforts to increase screening for colorectal cancer, especially by using methods shown to be effective (e.g., FOBT and proctosigmoidoscopy). However, evidence is insufficient to determine which of these screening methods is preferable or whether the combination of FOBT and sigmoidoscopy produces greater benefits than either test alone. The prevalences of screening for colorectal cancer are lower than those for screening for breast and cervical cancer; the substantial increase during the 1980s in the use of mammography has not occurred for use of colorectal cancer screening tests (*8–10*). Public health officials and policy makers should intensify efforts to educate providers and the public about the effectiveness of screening, to promote widespread use of the colorectal cancer screening guidelines developed by USPSTF, and to ensure access to screening tests for persons with low income.

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## *Notice to Readers*

### Establishment of a National Surveillance Program for Antimicrobial Resistance in *Salmonella*

On August 18, 1995, the Food and Drug Administration (FDA) approved sarafloxacin for use in drinking water for poultry to control illnesses caused by *Escherichia coli*.* This is the first fluoroquinolone antimicrobial agent approved for use in animals intended for food in the United States. Fluoroquinolones commonly are used to treat many infectious conditions in adult humans, including invasive *Salmonella* and *Campylobacter* infections, which occur more frequently in persons infected with human immunodeficiency virus (*1*). There have been no reports of the detection of

*60 FR 50,097.

*Notice to Readers — Continued*

fluoroquinolone resistance among *Salmonella* or *Campylobacter* isolates in the United States, but fluoroquinolone-resistant *Salmonella* have been reported among human isolates from France (*2*) and Germany (*3*). The recent approval and use of a fluoroquinolone antimicrobial agent in humans (norfloxacin) and in poultry (enrofloxacin) in the Netherlands was followed by the emergence of resistance among *Campylobacter* isolates from humans in that country (*4*). CDC recommends that clinical laboratories now include fluoroquinolones when determining the susceptibility patterns of *Salmonella* and *Campylobacter* isolates from humans, and contact CDC through state health departments if such resistance is detected.

FDA, CDC, a sample of state public health laboratories, and the U.S. Department of Agriculture are implementing a national surveillance program for *Salmonella* isolates obtained from clinical specimens from humans and animals (farm and companion), healthy farm animals, carcasses at slaughter plants, and vegetables to monitor changes in antimicrobial susceptibilities. Confidentiality regarding the source of the isolates will be maintained throughout the study. This surveillance program will facilitate the timely detection of changes in susceptibility patterns to fluoroquinolones in *Salmonella* in either humans, animals, or vegetables and identify areas for educational programs or further studies.

*Reported by: Center for Veterinary Medicine, Food and Drug Administration. Animal and Plant Health Inspection Svc, Food Safety and Inspection Svc, Agricultural Research Svc, US Dept of Agriculture. Foodborne and Diarrheal Diseases Br, Div of Bacterial and Mycotic Diseases, National Center for Infectious Diseases, CDC.*

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## *Notice to Readers*

### Diagnostic Tests for Silicone Breast Disease

During August 1992, the Food and Drug Administration (FDA) became aware of diagnostic testing profiles offered by commercial laboratories for evaluating silicone breast disease. These profiles comprise a variety of tests that consist of three basic types: 1) tests measuring chemical constituents of the implant, such as silicone (methylpolysiloxane) or breakdown products (toluene diamines) of the implant; 2) tests that measure circulating serum antibodies to silicone; and 3) tests that

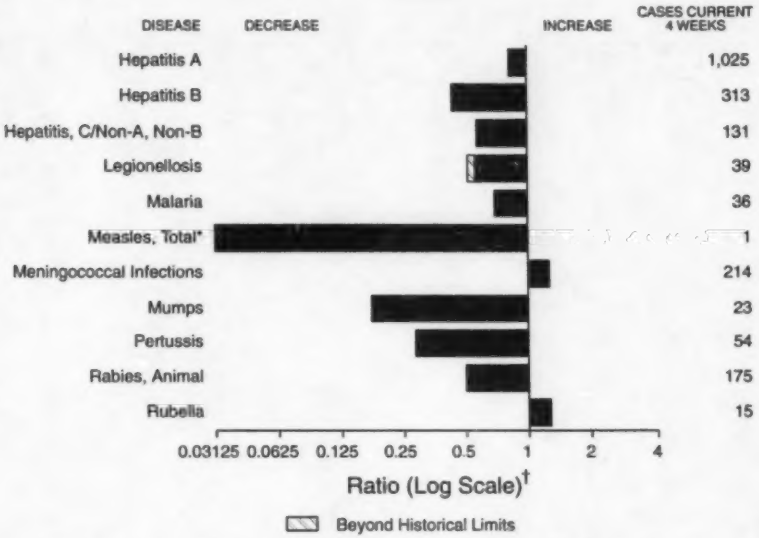
*Notice to Readers — Continued*

measure "autoantibodies" to a number of allegedly "silicone-modified" host proteins, such as fibrin, laminin, and myelin.

None of these products have been cleared (510k process) or approved (Premarket Approval) by the FDA. Their diagnostic accuracy is not established, and the value and usefulness of these tests remain speculative. In managing patients with silicone breast implants, the Public Health Service advises clinicians to continue to rely on established techniques: history, physical examination, conventional and established laboratory tests for immunologic disease, and radiologic imaging.

In some instances, tests for silicone breast disease are being marketed under a label "For Research Use Only; not for Use in Diagnostic Procedures." These tests are intended for research use and should not be used for patient diagnosis or management. Additional information is available from Steve Gutman, M.D., Director, Division of Clinical Laboratory Devices, Office of Device Evaluation, FDA, telephone (301) 594-3084.

**FIGURE I. Selected notifiable disease reports, comparison of 4-week totals ending February 3, 1996, with historical data — United States**




*The large apparent decrease in the number of reported cases of measles (total) reflects dramatic fluctuations in the historical baseline. (Ratio [log scale] for week 5 measles [total] is .0098232.)
†Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

**TABLE I. Summary — cases of selected notifiable diseases, United States, cumulative, week ending February 3, 1996 (5th Week)**

| | Cum. 1996 | | Cum. 1996 |
|---|---|---|---|
| Anthrax | - | HIV infection, pediatric*§ | 26 |
| Brucellosis | 4 | Plague | - |
| Cholera | - | Poliomyelitis, paralytic¶ | - |
| Congenital rubella syndrome | - | Psittacosis | 1 |
| Cryptosporidiosis* | 79 | Rabies, human | - |
| Diphtheria | - | Rocky Mountain spotted fever (RMSF) | 4 |
| Encephalitis: California* | - | Streptococcal toxic-shock syndrome* | - |
| eastern equine* | - | Syphilis, congenital** | - |
| St. Louis* | - | Tetanus | - |
| western equine* | - | Toxic-shock syndrome | 11 |
| Hansen Disease | 3 | Trichinosis | 2 |
| Hantavirus pulmonary syndrome*† | - | Typhoid fever | 10 |

*Not notifiable in all states.
†Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (NCID).
§Updated monthly to the Division of HIV/AIDS Prevention, National Center for Prevention Services (NCPS), last update January 30, 1996.
¶No suspected cases of polio reported for 1996.
**Updated quarterly from reports to the Division of STD Prevention, NCPS. First quarter 1996 is not yet available.
-: no reported cases

## TABLE II. Cases of selected notifiable diseases, United States, weeks ending February 3, 1996, and February 4, 1995 (5th Week)

| Reporting Area | AIDS* | | Chlamydia | *Escherichia coli* O157:H7 NETSS† | *Escherichia coli* O157:H7 PHLIS§ | Gonorrhea | | Hepatitis C/NA,NB | | Legionellosis | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cum. 1996 | Cum. 1995 | Cum. 1996 | Cum. 1996 | Cum. 1996 | Cum. 1996 | Cum. 1995 | Cum. 1996 | Cum. 1995 | Cum. 1996 | Cum. 1995 |
| UNITED STATES | 4,357 | 5,498 | 11,480 | 56 | 8 | 26,448 | 37,576 | 209 | 231 | 61 | 97 |
| NEW ENGLAND | 208 | 306 | 880 | 12 | 1 | 554 | 659 | - | 1 | 4 | - |
| Maine | 7 | 15 | - | 1 | - | 3 | 5 | - | - | - | - |
| N.H. | 3 | 5 | 59 | 1 | 1 | 11 | 9 | - | - | - | - |
| Vt. | - | - | - | 2 | - | 12 | 2 | - | - | - | - |
| Mass. | 135 | 191 | 621 | 5 | - | 226 | 337 | - | 1 | 3 | - |
| R.I. | 9 | 9 | 200 | 2 | - | 49 | 45 | - | - | 1 | - |
| Conn. | 54 | 86 | - | 1 | - | 253 | 261 | - | - | N | N |
| MID. ATLANTIC | 1,235 | 1,702 | 871 | 3 | 3 | 701 | 4,534 | 14 | 23 | 5 | 12 |
| Upstate N.Y. | 158 | 188 | N | 2 | 3 | - | 920 | 12 | 7 | - | 2 |
| N.Y. City | 696 | 921 | - | - | - | - | 1,493 | 1 | 1 | - | 1 |
| N.J. | 244 | 364 | 871 | - | - | 245 | 379 | - | 10 | - | 4 |
| Pa. | 137 | 229 | - | N | - | 456 | 1,742 | 1 | 5 | 5 | 5 |
| E.N. CENTRAL | 419 | 474 | 2,977 | 8 | 1 | 4,703 | 8,102 | 30 | 31 | 28 | 39 |
| Ohio | 143 | 31 | 578 | 5 | - | 394 | 2,575 | 1 | 1 | 14 | 16 |
| Ind. | 50 | 38 | - | 2 | - | 785 | 746 | - | - | 5 | 7 |
| Ill. | 156 | 243 | - | 1 | - | 1,824 | 1,823 | - | 11 | - | 7 |
| Mich. | 37 | 133 | 2,263 | - | 1 | 1,590 | 2,240 | 29 | 19 | 9 | 2 |
| Wis. | 33 | 29 | 136 | N | - | 110 | 718 | - | - | - | 7 |
| W.N. CENTRAL | 145 | 100 | 1,326 | 8 | 2 | 1,110 | 2,184 | 16 | 7 | 1 | 8 |
| Minn. | 20 | 25 | - | 2 | 2 | - | 312 | - | - | - | - |
| Iowa | 17 | 4 | - | 2 | - | - | 155 | 15 | 2 | 1 | 2 |
| Mo. | 53 | 50 | 847 | - | - | 782 | 1,299 | 1 | 2 | - | 6 |
| N. Dak. | - | - | - | - | - | - | - | - | - | - | - |
| S. Dak. | 2 | - | 91 | - | - | 12 | 16 | - | 1 | - | - |
| Nebr. | 15 | 12 | 388 | - | - | 57 | 67 | - | 1 | - | - |
| Kans. | 38 | 9 | - | 4 | - | 259 | 335 | - | 1 | - | - |
| S. ATLANTIC | 880 | 1,328 | 3,454 | 7 | - | 13,368 | 11,570 | 7 | 17 | 7 | 22 |
| Del. | 32 | 30 | - | - | - | 155 | 218 | - | - | - | - |
| Md. | 69 | 178 | 215 | N | - | 926 | 1,688 | - | - | 1 | 6 |
| D.C. | 64 | 76 | N | - | - | 380 | 700 | - | - | - | - |
| Va. | 36 | 134 | 948 | N | - | 919 | 1,033 | - | - | 2 | - |
| W. Va. | 7 | 4 | - | N | - | 45 | 73 | 3 | 5 | 1 | 2 |
| N.C. | 1 | 81 | - | 2 | - | 1,415 | 2,544 | 1 | 6 | 3 | 8 |
| S.C. | 13 | 73 | - | 1 | - | 5,444 | 1,257 | 1 | 1 | - | 2 |
| Ga. | 215 | 234 | 474 | 1 | - | 2,504 | 2,016 | - | - | - | 4 |
| Fla. | 443 | 518 | 1,817 | - | - | 1,600 | 2,041 | 2 | 5 | - | 2 |
| E.S. CENTRAL | 152 | 132 | 664 | 3 | - | 2,478 | 4,535 | - | 77 | 9 | 4 |
| Ky. | 43 | 7 | - | - | - | 389 | 532 | - | 1 | 2 | 1 |
| Tenn. | 56 | 73 | 659 | N | - | 741 | 974 | - | 75 | 3 | 1 |
| Ala. | 35 | 34 | - | 1 | - | 1,312 | 2,160 | - | 1 | - | 1 |
| Miss. | 18 | 18 | 5 | 2 | - | 56 | 869 | - | - | 4 | 1 |
| W.S. CENTRAL | 495 | 370 | - | 2 | - | 903 | 1,817 | 48 | 4 | - | 1 |
| Ark. | 19 | 20 | - | 1 | - | 218 | 310 | - | - | - | - |
| La. | 113 | 90 | - | N | - | 685 | 1,235 | 2 | - | - | - |
| Okla. | 1 | 35 | - | 1 | - | - | 58 | 42 | 4 | - | 1 |
| Tex. | 362 | 225 | - | - | - | - | 214 | 4 | - | - | - |
| MOUNTAIN | 120 | 172 | 361 | 5 | - | 549 | 866 | 56 | 18 | 2 | 7 |
| Mont. | 2 | 7 | - | - | - | 2 | 13 | 3 | 2 | - | 1 |
| Idaho | 1 | 5 | 129 | 1 | - | 8 | 9 | 21 | 3 | - | - |
| Wyo. | - | 1 | 65 | - | - | 5 | 6 | 12 | 6 | - | - |
| Colo. | 54 | 75 | - | 2 | - | 201 | 275 | 3 | 5 | 2 | 1 |
| N. Mex. | 8 | 7 | - | - | - | 94 | 127 | 10 | - | - | - |
| Ariz. | 37 | 38 | - | N | - | 190 | 275 | 3 | 2 | - | 1 |
| Utah | 17 | 5 | 68 | 1 | - | 26 | 19 | 4 | - | - | 2 |
| Nev. | 1 | 34 | 99 | 1 | - | 23 | 142 | - | - | - | 2 |
| PACIFIC | 703 | 914 | 947 | 8 | 1 | 2,080 | 3,309 | 38 | 53 | 5 | 4 |
| Wash. | 65 | 91 | 886 | 1 | 1 | 268 | 251 | 2 | 2 | - | - |
| Oreg. | 48 | 58 | - | 3 | - | 9 | 29 | 2 | 4 | - | - |
| Calif. | 580 | 707 | - | 2 | - | 1,738 | 2,882 | 23 | 40 | 5 | 2 |
| Alaska | 3 | 18 | N | - | - | 49 | 98 | 1 | - | - | - |
| Hawaii | 7 | 40 | 61 | N | - | 18 | 49 | 10 | 7 | - | 2 |
| Guam | - | - | - | N | - | - | 8 | - | - | - | - |
| P.R. | 255 | 62 | N | N | U | 5 | 59 | 2 | 1 | - | - |
| V.I. | 1 | - | N | N | U | - | - | - | - | - | - |
| Amer. Samoa | - | - | - | N | U | - | 3 | - | - | - | - |
| C.N.M.I. | - | - | N | N | U | - | 3 | - | - | - | - |

N: Not notifiable U: Unavailable -: no reported cases C.N.M.I.: Commonwealth of Northern Mariana Islands

*Updated monthly to the Division of HIV/AIDS Prevention, National Center for Prevention Services, last update January 30, 1996.
†National Electronic Telecommunications System for Surveillance.
§Public Health Laboratory Information System.

## TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending February 3, 1996, and February 4, 1995 (5th Week)

| Reporting Area | Lyme Disease | | Malaria | | Meningococcal Disease | | Syphilis (Primary & Secondary) | | Tuberculosis | | Rabies, Animal | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cum. 1996 | Cum. 1995 | Cum. 1996 | Cum. 1995 | Cum. 1996 | Cum. 1995 | Cum. 1996 | Cum. 1995 | Cum. 1996 | Cum. 1995 | Cum. 1996 | Cum. 1995 |
| UNITED STATES | 131 | 321 | 52 | 67 | 338 | 282 | 775 | 1,500 | 743 | 928 | 247 | 518 |
| NEW ENGLAND | 11 | 1 | 3 | 2 | 17 | 20 | 14 | 18 | 22 | 11 | 46 | 143 |
| Maine | - | - | - | - | 4 | 2 | - | - | 4 | - | - | - |
| N.H. | - | - | - | - | 1 | 6 | - | 1 | - | - | 3 | 21 |
| Vt. | - | - | 1 | - | 1 | 1 | - | - | - | - | 9 | 18 |
| Mass. | 5 | 1 | 2 | - | 4 | 7 | 7 | 8 | 3 | 3 | 13 | 73 |
| R.I. | 6 | - | - | 2 | - | - | - | - | 5 | 2 | 6 | - |
| Conn. | - | - | - | - | 7 | 4 | 7 | 9 | 10 | 6 | 15 | 31 |
| MID. ATLANTIC | 107 | 252 | 2 | 15 | 10 | 30 | 21 | 124 | 43 | 95 | 33 | 139 |
| Upstate N.Y. | 1 | 34 | - | 2 | 2 | 11 | - | 13 | - | 13 | 19 | 85 |
| N.Y. City | 73 | 27 | 2 | 6 | 4 | 6 | 10 | 86 | 20 | 31 | - | - |
| N.J. | - | 43 | - | 6 | - | 9 | 7 | 15 | 22 | 19 | 7 | 26 |
| Pa. | 33 | 148 | - | 1 | 4 | 4 | 4 | 10 | 1 | 32 | 7 | 28 |
| E.N. CENTRAL | 1 | 5 | 7 | 14 | 47 | 48 | 190 | 244 | 175 | 136 | 2 | 1 |
| Ohio | 1 | 3 | - | - | 26 | 11 | 77 | 81 | 19 | 27 | 1 | 1 |
| Ind. | - | 1 | 1 | - | 4 | 11 | 28 | 21 | 14 | 3 | - | - |
| Ill. | - | 1 | 1 | 11 | 14 | 17 | 55 | 83 | 127 | 78 | - | - |
| Mich. | - | - | 5 | 1 | 3 | 4 | 24 | 32 | 13 | 25 | - | - |
| Wis. | - | - | - | 2 | - | 5 | 6 | 27 | 2 | 3 | 1 | - |
| W.N. CENTRAL | 4 | 6 | - | 2 | 30 | 14 | 27 | 81 | 16 | 31 | 19 | 27 |
| Minn. | - | - | - | - | - | - | - | 3 | 3 | 6 | 1 | - |
| Iowa | 4 | - | - | - | 11 | 5 | - | 6 | 3 | 10 | 16 | 7 |
| Mo. | - | 3 | - | 2 | 8 | 6 | 24 | 72 | 7 | 7 | - | 4 |
| N. Dak. | - | - | - | - | 1 | - | - | - | - | - | 2 | 4 |
| S. Dak. | - | - | - | - | 2 | - | - | - | - | - | - | 9 |
| Nebr. | - | - | - | - | 4 | 1 | 3 | - | - | - | - | - |
| Kans. | - | 3 | - | - | 4 | 2 | - | - | 3 | 8 | - | 3 |
| S. ATLANTIC | 7 | 48 | 12 | 12 | 60 | 46 | 240 | 382 | 49 | 129 | 119 | 152 |
| Del. | - | 7 | 2 | - | 1 | - | 5 | 3 | - | 6 | 8 | 8 |
| Md. | 7 | 32 | 2 | 4 | 9 | - | 22 | 41 | 3 | 46 | 32 | 39 |
| D.C. | - | - | 1 | - | 2 | 1 | 6 | 17 | - | 12 | - | 1 |
| Va. | - | 1 | 3 | 2 | 4 | 3 | 37 | 53 | - | - | 35 | 28 |
| W. Va. | - | 4 | - | - | 1 | - | - | - | 7 | 12 | 1 | 6 |
| N.C. | - | 3 | 2 | 1 | 6 | 6 | 83 | 101 | 17 | 9 | 15 | 33 |
| S.C. | - | 1 | - | - | 11 | 3 | 38 | 61 | 19 | 16 | 5 | 10 |
| Ga. | - | - | 2 | 2 | 22 | 19 | 24 | 60 | - | 28 | 23 | 19 |
| Fla. | - | - | - | 3 | 4 | 14 | 25 | 46 | 3 | - | - | 8 |
| E.S. CENTRAL | - | 2 | - | 1 | 30 | 12 | 212 | 376 | 67 | 65 | 7 | 18 |
| Ky. | - | - | - | - | 6 | 2 | 26 | 24 | 12 | 6 | - | 3 |
| Tenn. | - | 1 | - | - | - | 2 | 58 | 60 | - | 28 | - | 7 |
| Ala. | - | - | - | 1 | 14 | 6 | 49 | 68 | 27 | 31 | 7 | 8 |
| Miss. | - | 1 | - | - | 10 | 2 | 79 | 224 | 28 | - | - | - |
| W.S. CENTRAL | - | - | - | - | 42 | 16 | 60 | 173 | 12 | 14 | 1 | 15 |
| Ark. | - | - | - | - | 7 | 1 | 20 | 47 | 3 | 6 | - | 9 |
| La. | - | - | - | - | 7 | 4 | 40 | 99 | - | - | - | 4 |
| Okla. | - | - | - | - | 2 | 3 | - | 13 | 9 | 8 | 1 | 2 |
| Tex. | - | - | - | - | 26 | 8 | - | 14 | - | - | - | - |
| MOUNTAIN | - | 1 | 7 | 5 | 31 | 23 | 10 | 20 | 15 | 25 | 2 | 5 |
| Mont. | - | - | - | 1 | 1 | - | - | - | - | - | - | 3 |
| Idaho | - | - | 1 | - | 3 | 2 | - | - | 1 | 2 | - | - |
| Wyo. | - | - | - | - | - | 1 | - | - | - | - | 2 | - |
| Colo. | - | - | 4 | 2 | 3 | 8 | 6 | 8 | - | 2 | - | - |
| N. Mex. | - | - | 1 | 2 | 8 | 4 | - | 5 | 1 | 4 | - | - |
| Ariz. | - | - | - | - | 12 | 7 | 2 | 3 | 13 | 13 | - | 2 |
| Utah | - | - | 1 | - | 2 | - | - | 1 | - | 3 | - | - |
| Nev. | - | 1 | - | - | 2 | 1 | 2 | 3 | - | 1 | - | - |
| PACIFIC | 1 | 6 | 21 | 16 | 71 | 73 | 1 | 82 | 344 | 422 | 18 | 18 |
| Wash. | - | - | - | - | 5 | 4 | - | 1 | 20 | 26 | - | - |
| Oreg. | 1 | - | 2 | 2 | 16 | 13 | 1 | 1 | 5 | 2 | - | - |
| Calif. | - | 6 | 19 | 13 | 48 | 55 | - | 80 | 303 | 372 | 15 | 18 |
| Alaska | - | - | - | 1 | 1 | - | - | - | 9 | 8 | 3 | - |
| Hawaii | - | - | - | - | 1 | 1 | - | - | 7 | 14 | - | - |
| Guam | - | - | - | - | - | - | - | - | - | 4 | - | - |
| P.R. | - | - | - | - | - | 2 | 10 | 29 | - | - | 1 | 8 |
| V.I. | - | - | - | - | - | - | - | - | - | - | - | - |
| Amer. Samoa | - | - | - | - | - | - | - | - | - | 1 | - | - |
| C.N.M.I. | - | - | - | - | - | - | - | - | - | 3 | - | - |

N: Not notifiable U: Unavailable -: no reported cases

## TABLE III. Cases of selected notifiable diseases preventable by vaccination, United States, weeks ending February 3, 1996, and February 4, 1995 (5th Week)

| Reporting Area | *H. influenzae*, invasive | | Hepatitis (viral), by type | | | | Measles (Rubeola) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | A | | B | | Indigenous | | Imported[†] | |
| | Cum. 1996* | Cum. 1995 | Cum. 1996 | Cum. 1995 | Cum. 1996 | Cum. 1995 | 1996 | Cum. 1996 | 1996 | Cum. 1996 |
| UNITED STATES | 102 | 129 | 1,640 | 1,913 | 451 | 640 | 1 | 1 | - | 1 |
| NEW ENGLAND | 5 | 1 | 20 | 12 | 2 | 20 | 1 | 1 | - | - |
| Maine | - | - | 3 | 3 | - | 1 | - | - | - | - |
| N.H. | 4 | - | 1 | - | - | - | - | - | - | - |
| Vt. | - | 1 | - | - | - | - | - | - | - | - |
| Mass. | 1 | - | 9 | 2 | 1 | 2 | 1 | 1 | - | - |
| R.I. | - | - | 2 | 2 | 1 | 2 | - | - | - | - |
| Conn. | - | - | 5 | 5 | - | 15 | - | - | - | - |
| MID. ATLANTIC | 10 | 15 | 82 | 95 | 55 | 48 | - | - | - | - |
| Upstate N.Y. | 5 | 4 | 3 | 8 | 7 | 12 | - | - | - | - |
| N.Y. City | 2 | 2 | 71 | 48 | 42 | 7 | - | - | - | - |
| N.J. | - | 4 | - | 19 | - | 16 | - | - | - | - |
| Pa. | 3 | 5 | 8 | 20 | 6 | 13 | - | - | - | - |
| E.N. CENTRAL | 15 | 33 | 154 | 343 | 51 | 104 | - | - | - | - |
| Ohio | 14 | 19 | 96 | 184 | 12 | 6 | - | - | - | - |
| Ind. | - | 2 | 25 | 22 | 1 | 25 | - | - | - | - |
| Ill. | 1 | 10 | 2 | 76 | 2 | 31 | - | - | - | - |
| Mich. | - | 2 | 31 | 39 | 35 | 36 | - | - | - | - |
| Wis. | - | - | - | 22 | 1 | 6 | - | - | - | - |
| W.N. CENTRAL | 7 | 4 | 111 | 76 | 37 | 51 | - | - | - | - |
| Minn. | - | - | - | 4 | - | - | - | - | - | - |
| Iowa | 6 | 1 | 48 | 6 | 21 | 5 | - | - | - | - |
| Mo. | 1 | 3 | 36 | 58 | 8 | 44 | - | - | - | - |
| N. Dak. | - | - | 1 | - | - | - | - | - | - | - |
| S. Dak. | - | - | 6 | - | - | - | - | - | - | - |
| Nebr. | - | - | 10 | 3 | 2 | 2 | - | - | - | - |
| Kans. | - | - | 10 | 5 | 6 | - | - | - | - | - |
| S. ATLANTIC | 17 | 24 | 63 | 77 | 88 | 82 | - | - | - | - |
| Del. | - | - | 1 | 1 | - | 1 | - | - | - | - |
| Md. | 2 | 8 | 19 | 23 | 26 | 18 | - | - | - | - |
| D.C. | - | - | 1 | 1 | 1 | 7 | - | - | - | - |
| Va. | - | 3 | 3 | 20 | 5 | 9 | - | - | - | - |
| W. Va. | - | - | 2 | 3 | 3 | 7 | - | - | - | - |
| N.C. | 3 | 9 | 12 | 9 | 37 | 26 | - | - | - | - |
| S.C. | 1 | - | 7 | 1 | 4 | 2 | - | - | - | - |
| Ga. | 11 | 4 | - | - | - | - | - | - | - | - |
| Fla. | - | - | 18 | 19 | 10 | 12 | - | - | - | - |
| E.S. CENTRAL | 2 | 1 | 59 | 42 | 5 | 82 | - | - | - | - |
| Ky. | - | - | 4 | 9 | - | 11 | - | - | - | - |
| Tenn. | - | - | - | 15 | - | 62 | - | - | - | - |
| Ala. | 2 | 1 | 7 | 14 | 5 | 9 | - | - | - | - |
| Miss. | - | - | 48 | 4 | - | - | - | - | - | - |
| W.S. CENTRAL | 6 | 1 | 197 | 58 | 18 | 11 | - | - | - | - |
| Ark. | - | - | 48 | - | 2 | - | - | - | - | - |
| La. | - | - | 5 | 1 | 2 | 3 | - | - | - | - |
| Okla. | 6 | 1 | 98 | 46 | 6 | 7 | - | - | - | - |
| Tex. | - | - | 46 | 11 | 8 | 1 | - | - | - | - |
| MOUNTAIN | 9 | 12 | 283 | 374 | 81 | 43 | - | - | - | - |
| Mont. | - | - | 7 | 8 | - | 2 | - | - | - | - |
| Idaho | 1 | - | 50 | 39 | 10 | 2 | - | - | - | - |
| Wyo. | - | 1 | 1 | 6 | - | - | - | - | - | - |
| Colo. | 1 | - | 14 | 69 | 9 | 15 | - | - | - | - |
| N. Mex. | 3 | 2 | 57 | 91 | 41 | 14 | - | - | - | - |
| Ariz. | 2 | 6 | 59 | 62 | 7 | 5 | - | - | - | - |
| Utah | 1 | 1 | 76 | 86 | 8 | 1 | - | - | - | - |
| Nev. | 1 | 2 | 19 | 13 | 6 | 4 | - | - | - | - |
| PACIFIC | 31 | 38 | 671 | 836 | 114 | 199 | - | - | - | 1 |
| Wash. | - | 1 | 22 | 11 | 5 | 2 | - | - | - | - |
| Oreg. | 2 | 4 | 113 | 168 | 1 | 13 | U | - | U | - |
| Calif. | 27 | 31 | 524 | 645 | 105 | 181 | - | - | - | - |
| Alaska | - | - | 2 | 9 | 2 | 1 | - | - | - | - |
| Hawaii | 2 | 2 | 10 | 3 | 1 | 2 | - | - | - | 1 |
| Guam | - | - | - | - | - | - | U | - | U | - |
| P.R. | - | - | 11 | - | 8 | 7 | - | - | - | - |
| V.I. | - | - | - | - | - | - | U | - | U | - |
| Amer. Samoa | - | - | - | 2 | - | - | U | - | U | - |
| C.N.M.I. | - | - | - | 1 | - | - | U | - | U | - |

*Of 21 cases among children aged <5 years, serotype was reported for 6 and of those, 1 was type B.
[†]For imported measles, cases include only those resulting from importation from other countries.
N: Not notifiable U: Unavailable -: no reported cases

## TABLE III. (Cont'd.) Cases of selected notifiable diseases preventable by vaccination, United States, weeks ending February 3, 1996, and February 4, 1995 (5th Week)

| Reporting Area | Measles (Rubeola), cont'd. Total | | Mumps | | | Pertussis | | | Rubella | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cum. 1996 | Cum. 1995 | 1996 | Cum. 1996 | Cum. 1995 | 1996 | Cum. 1996 | Cum. 1995 | 1996 | Cum. 1996 | Cum. 1995 |
| UNITED STATES | 2 | 25 | 12 | 41 | 68 | 19 | 78 | 252 | - | 11 | 7 |
| NEW ENGLAND | 1 | 3 | - | - | - | - | 7 | 34 | - | 2 | 1 |
| Maine | - | - | - | - | - | - | 1 | 5 | - | - | - |
| N.H. | - | - | - | - | - | - | 1 | - | - | - | - |
| Vt. | - | - | - | - | - | - | 1 | 2 | - | - | - |
| Mass. | 1 | 1 | - | - | - | - | 4 | 26 | - | - | 1 |
| R.I. | - | 2 | - | - | - | - | - | - | - | - | - |
| Conn. | - | - | - | - | - | - | - | 1 | - | 2 | - |
| MID. ATLANTIC | - | - | - | 1 | 9 | 2 | 5 | 10 | - | - | - |
| Upstate N.Y. | - | - | - | 1 | 2 | 2 | 5 | 5 | - | - | - |
| N.Y. City | - | - | - | - | 1 | - | - | 3 | - | - | - |
| N.J. | - | - | - | - | - | - | - | 2 | - | - | - |
| Pa. | - | - | - | - | 6 | - | - | - | - | - | - |
| E.N. CENTRAL | - | - | 1 | 12 | 14 | 8 | 26 | 19 | - | - | - |
| Ohio | - | - | - | 5 | 7 | 5 | 19 | 16 | - | - | - |
| Ind. | - | - | - | - | - | 1 | 1 | - | - | - | - |
| Ill. | - | - | - | - | - | - | - | - | - | - | - |
| Mich. | - | - | 1 | 7 | 7 | 2 | 6 | 2 | - | - | - |
| Wis. | - | - | - | - | - | - | - | 1 | - | - | - |
| W.N. CENTRAL | - | - | - | 2 | 8 | - | - | 9 | - | - | - |
| Minn. | - | - | - | - | - | - | - | - | - | - | - |
| Iowa | - | - | - | - | 1 | - | - | 1 | - | - | - |
| Mo. | - | - | - | - | 7 | - | - | 3 | - | - | - |
| N. Dak. | - | - | - | 2 | - | - | - | - | - | - | - |
| S. Dak. | - | - | - | - | - | - | - | - | - | - | - |
| Nebr. | - | - | - | - | - | - | - | - | - | - | - |
| Kans. | - | - | - | - | - | - | - | 5 | - | - | - |
| S. ATLANTIC | - | - | 1 | 2 | 9 | 2 | 8 | 33 | - | - | - |
| Del. | - | - | - | - | - | - | - | 1 | - | - | - |
| Md. | - | - | - | - | 2 | 1 | 5 | - | - | - | - |
| D.C. | - | - | - | - | - | - | - | 1 | - | - | - |
| Va. | - | - | - | - | 3 | - | - | - | - | - | - |
| W. Va. | - | - | - | - | - | - | - | - | - | - | - |
| N.C. | - | - | - | - | 3 | - | - | 30 | - | - | - |
| S.C. | - | - | - | 1 | - | 1 | 2 | 1 | - | - | - |
| Ga. | - | - | 1 | 1 | - | - | 1 | - | - | - | - |
| Fla. | - | - | - | - | 1 | - | - | - | - | - | - |
| E.S. CENTRAL | - | - | 2 | 3 | 3 | - | 1 | 3 | - | - | - |
| Ky. | - | - | - | - | - | - | - | - | - | - | - |
| Tenn. | - | - | - | - | - | - | - | - | - | - | - |
| Ala. | - | - | 2 | 3 | 2 | - | 1 | 3 | - | - | - |
| Miss. | - | - | - | - | 1 | - | - | - | N | N | N |
| W.S. CENTRAL | - | - | - | 1 | 1 | 1 | 2 | 2 | - | - | - |
| Ark. | - | - | - | - | 1 | - | 1 | - | - | - | - |
| La. | - | - | - | 1 | - | 1 | 1 | - | - | - | - |
| Okla. | - | - | - | - | - | - | - | - | - | - | - |
| Tex. | - | - | - | - | - | - | - | 2 | - | - | - |
| MOUNTAIN | - | 22 | - | 6 | 2 | 4 | 14 | 101 | - | - | - |
| Mont. | - | - | - | - | - | - | - | 2 | - | - | - |
| Idaho | - | - | - | - | - | 1 | 1 | 36 | - | - | - |
| Wyo. | - | - | - | - | - | - | - | - | - | - | - |
| Colo. | - | 15 | - | - | - | - | - | 15 | - | - | - |
| N. Mex. | - | 3 | N | N | N | 1 | 8 | 3 | - | - | - |
| Ariz. | - | 4 | - | - | - | 2 | 2 | 45 | - | - | - |
| Utah | - | - | - | - | 1 | - | - | - | - | - | - |
| Nev. | - | - | - | 6 | 1 | - | 3 | - | - | - | - |
| PACIFIC | 1 | - | 8 | 14 | 22 | 2 | 15 | 41 | - | 9 | 6 |
| Wash. | - | - | 1 | 1 | 1 | 2 | 3 | - | - | - | - |
| Oreg. | - | - | N | N | N | U | 12 | - | U | - | - |
| Calif. | - | - | 3 | 7 | 19 | - | - | 39 | - | 9 | 6 |
| Alaska | - | - | 1 | 1 | 2 | - | - | - | - | - | - |
| Hawaii | 1 | - | 3 | 5 | - | - | - | 2 | - | - | - |
| Guam | - | - | U | - | - | U | - | - | U | - | - |
| P.R. | - | - | - | - | - | - | - | - | - | - | - |
| V.I. | - | - | U | - | - | U | - | - | U | - | - |
| Amer. Samoa | - | - | U | - | - | U | - | - | U | - | - |
| C.N.M.I. | - | - | U | - | - | U | - | - | U | - | - |

N: Not notifiable U: Unavailable -: no reported cases

# TABLE IV. Deaths in 121 U.S. cities,* week ending February 3, 1996 (5th Week)

| Reporting Area | All Causes, By Age (Years) | | | | | | P&I† Total |
|---|---|---|---|---|---|---|---|
| | All Ages | ≥65 | 45-64 | 25-44 | 1-24 | <1 | |
| NEW ENGLAND | 613 | 429 | 123 | 35 | 16 | 10 | 31 |
| Boston, Mass. | 190 | 116 | 46 | 13 | 11 | 4 | 6 |
| Bridgeport, Conn. | 50 | 35 | 13 | 2 | - | - | 4 |
| Cambridge, Mass. | 20 | 14 | 4 | 1 | 1 | - | 1 |
| Fall River, Mass. | 36 | 32 | 1 | 2 | 1 | - | 1 |
| Hartford, Conn. | U | U | U | U | U | U | U |
| Lowell, Mass. | 28 | 25 | 3 | - | - | - | 4 |
| Lynn, Mass. | 16 | 7 | 4 | 4 | 1 | - | - |
| New Bedford, Mass. | 31 | 26 | 5 | - | - | - | 3 |
| New Haven, Conn. | 40 | 23 | 8 | 5 | 2 | 2 | 3 |
| Providence, R.I. | 50 | 37 | 10 | 1 | - | 2 | - |
| Somerville, Mass. | 9 | 5 | 3 | 1 | - | - | - |
| Springfield, Mass. | 48 | 32 | 14 | 2 | - | - | 4 |
| Waterbury, Conn. | 36 | 33 | 2 | 1 | - | - | 2 |
| Worcester, Mass. | 59 | 44 | 10 | 3 | - | 2 | 3 |
| MID. ATLANTIC | 2,537 | 1,674 | 508 | 259 | 41 | 55 | 133 |
| Albany, N.Y. | 45 | 26 | 11 | 6 | 1 | 1 | 2 |
| Allentown, Pa. | 29 | 26 | 3 | - | - | - | - |
| Buffalo, N.Y. | U | U | U | U | U | U | U |
| Camden, N.J. | 41 | 27 | 8 | 4 | 1 | 1 | 1 |
| Elizabeth, N.J. | 20 | 12 | 6 | 1 | - | 1 | 1 |
| Erie, Pa.§ | 42 | 33 | 8 | 1 | - | - | 4 |
| Jersey City, N.J. | 62 | 45 | 8 | 2 | 2 | 5 | 3 |
| New York City, N.Y. | 1,416 | 914 | 292 | 165 | 18 | 27 | 53 |
| Newark, N.J. | 79 | 30 | 21 | 19 | 6 | 3 | 4 |
| Paterson, N.J. | 31 | 19 | 7 | 1 | 2 | 2 | 3 |
| Philadelphia, Pa. | 300 | 195 | 70 | 31 | 4 | 10 | 15 |
| Pittsburgh, Pa.§ | 91 | 62 | 14 | 9 | 5 | 1 | 9 |
| Reading, Pa. | 23 | 19 | 3 | 1 | - | - | 4 |
| Rochester, N.Y. | 130 | 107 | 17 | 5 | 1 | - | 17 |
| Schenectady, N.Y. | 21 | 16 | 3 | 2 | - | - | 2 |
| Scranton, Pa.§ | 39 | 33 | 6 | - | - | - | - |
| Syracuse, N.Y. | 104 | 78 | 17 | 5 | 1 | 3 | 12 |
| Trenton, N.J. | 51 | 31 | 13 | 6 | - | 1 | 2 |
| Utica, N.Y. | 13 | 11 | 1 | 1 | - | - | 1 |
| Yonkers, N.Y. | U | U | U | U | U | U | U |
| E.N. CENTRAL | 2,521 | 1,717 | 488 | 188 | 62 | 66 | 191 |
| Akron, Ohio | 50 | 41 | 5 | 3 | - | 1 | - |
| Canton, Ohio | 26 | 18 | 5 | 2 | 1 | - | 5 |
| Chicago, Ill. | 435 | 268 | 103 | 33 | 15 | 16 | 39 |
| Cincinnati, Ohio | 157 | 103 | 32 | 12 | 3 | 7 | 17 |
| Cleveland, Ohio | 160 | 103 | 36 | 11 | 4 | 6 | 1 |
| Columbus, Ohio | 218 | 134 | 52 | 21 | 7 | 4 | 19 |
| Dayton, Ohio | 162 | 123 | 26 | 9 | 2 | 2 | 20 |
| Detroit, Mich. | 231 | 140 | 39 | 36 | 9 | 7 | 9 |
| Evansville, Ind. | 41 | 32 | 6 | 2 | 1 | - | 3 |
| Fort Wayne, Ind. | 58 | 46 | 8 | 2 | 1 | 1 | 1 |
| Gary, Ind. | 21 | 11 | 5 | 2 | 2 | 1 | - |
| Grand Rapids, Mich. | 63 | 45 | 9 | 2 | 3 | 4 | 11 |
| Indianapolis, Ind. | 375 | 249 | 75 | 30 | 7 | 14 | 31 |
| Madison, Wis. | 70 | 52 | 11 | 4 | 2 | 1 | 7 |
| Milwaukee, Wis. | 141 | 107 | 30 | 4 | - | - | 7 |
| Peoria, Ill. | 43 | 34 | 6 | 2 | 1 | - | 1 |
| Rockford, Ill. | 64 | 51 | 10 | 2 | - | 1 | 12 |
| South Bend, Ind. | 37 | 28 | 3 | 4 | 1 | 1 | 1 |
| Toledo, Ohio | 107 | 85 | 15 | 5 | 1 | 1 | 6 |
| Youngstown, Ohio | 62 | 47 | 10 | 2 | 2 | 1 | 1 |
| W.N. CENTRAL | 791 | 584 | 115 | 44 | 17 | 26 | 61 |
| Des Moines, Iowa | 71 | 53 | 14 | 4 | - | - | 13 |
| Duluth, Minn. | 34 | 29 | 5 | - | - | - | 1 |
| Kansas City, Kans. | 32 | 23 | 5 | 4 | - | - | 1 |
| Kansas City, Mo. | 102 | 63 | 17 | 9 | 1 | 7 | 4 |
| Lincoln, Nebr. | 35 | 28 | 4 | 1 | 1 | 1 | 3 |
| Minneapolis, Minn. | 172 | 132 | 26 | 6 | 1 | 7 | 20 |
| Omaha, Nebr. | 94 | 67 | 15 | 4 | 3 | 5 | 5 |
| St. Louis, Mo. | 99 | 75 | 14 | 4 | 2 | 4 | 7 |
| St. Paul, Minn. | 77 | 59 | 11 | 3 | 3 | 1 | 4 |
| Wichita, Kans. | 75 | 55 | 4 | 9 | 6 | 1 | 3 |

| Reporting Area | All Causes, By Age (Years) | | | | | | P&I† Total |
|---|---|---|---|---|---|---|---|
| | All Ages | ≥65 | 45-64 | 25-44 | 1-24 | <1 | |
| S. ATLANTIC | 1,183 | 762 | 230 | 128 | 39 | 24 | 79 |
| Atlanta, Ga. | 245 | 139 | 57 | 29 | 10 | 10 | 4 |
| Baltimore, Md. | 121 | 77 | 17 | 21 | 5 | 1 | 14 |
| Charlotte, N.C. | 76 | 44 | 16 | 12 | 4 | - | 8 |
| Jacksonville, Fla. | 119 | 72 | 27 | 13 | 6 | 1 | 7 |
| Miami, Fla. | 125 | 77 | 26 | 16 | 4 | 2 | 1 |
| Norfolk, Va. | 55 | 38 | 10 | 5 | - | 2 | 5 |
| Richmond, Va. | 96 | 56 | 20 | 10 | 6 | 4 | 6 |
| Savannah, Ga. | 50 | 36 | 10 | 2 | 2 | - | 10 |
| St. Petersburg, Fla. | 62 | 51 | 8 | 2 | - | 1 | 3 |
| Tampa, Fla. | 211 | 152 | 39 | 15 | 2 | 3 | 21 |
| Washington, D.C. | U | U | U | U | U | U | U |
| Wilmington, Del. | 23 | 20 | - | 3 | - | - | - |
| E.S. CENTRAL | 761 | 542 | 118 | 67 | 19 | 11 | 60 |
| Birmingham, Ala. | 149 | 97 | 26 | 15 | 4 | 3 | 7 |
| Chattanooga, Tenn. | 97 | 70 | 16 | 9 | 2 | - | 6 |
| Knoxville, Tenn. | 106 | 80 | 13 | 9 | 2 | 2 | 10 |
| Lexington, Ky. | 73 | 53 | 14 | 5 | 1 | - | 9 |
| Memphis, Tenn. | U | U | U | U | U | U | U |
| Mobile, Ala. | 151 | 111 | 19 | 12 | 5 | 4 | 12 |
| Montgomery, Ala. | 61 | 42 | 13 | 4 | 2 | - | 4 |
| Nashville, Tenn. | 124 | 89 | 17 | 13 | 3 | 2 | 12 |
| W.S. CENTRAL | 1,663 | 1,089 | 325 | 149 | 57 | 42 | 127 |
| Austin, Tex. | 59 | 38 | 7 | 9 | 4 | - | 4 |
| Baton Rouge, La. | 61 | 35 | 12 | 11 | 1 | 2 | - |
| Corpus Christi, Tex. | 60 | 40 | 14 | 4 | 1 | 1 | 4 |
| Dallas, Tex. | 182 | 116 | 36 | 17 | 10 | 3 | 8 |
| El Paso, Tex. | 146 | 102 | 28 | 8 | 5 | 2 | 5 |
| Ft. Worth, Tex. | 133 | 80 | 23 | 20 | 6 | 4 | 15 |
| Houston, Tex. | 438 | 273 | 98 | 41 | 12 | 14 | 45 |
| Little Rock, Ark. | 68 | 43 | 15 | 3 | 1 | 6 | 5 |
| New Orleans, La. | 74 | 40 | 6 | 15 | 9 | 4 | - |
| San Antonio, Tex. | 257 | 182 | 53 | 14 | 5 | 3 | 24 |
| Shreveport, La. | 78 | 68 | 6 | 1 | 2 | 1 | 11 |
| Tulsa, Okla. | 106 | 72 | 27 | 6 | 1 | 2 | 6 |
| MOUNTAIN | 1,019 | 690 | 194 | 86 | 23 | 25 | 101 |
| Albuquerque, N.M. | 93 | 58 | 18 | 11 | 4 | 2 | 6 |
| Colo. Springs, Colo. | 63 | 47 | 11 | 3 | 1 | 1 | 7 |
| Denver, Colo. | 109 | 75 | 18 | 8 | 2 | 6 | 13 |
| Las Vegas, Nev. | 207 | 141 | 42 | 19 | 4 | 1 | 21 |
| Ogden, Utah | 26 | 20 | 3 | 3 | - | - | 2 |
| Phoenix, Ariz. | 195 | 117 | 40 | 19 | 9 | 9 | 28 |
| Pueblo, Colo. | 24 | 19 | 3 | 2 | - | - | 2 |
| Salt Lake City, Utah | 119 | 85 | 23 | 7 | 3 | 1 | 9 |
| Tucson, Ariz. | 183 | 128 | 36 | 14 | - | 5 | 13 |
| PACIFIC | 1,349 | 921 | 227 | 135 | 32 | 34 | 152 |
| Berkeley, Calif. | 25 | 15 | 4 | 6 | - | - | 1 |
| Fresno, Calif. | 99 | 71 | 11 | 8 | 4 | 5 | 13 |
| Glendale, Calif. | U | U | U | U | U | U | U |
| Honolulu, Hawaii | 94 | 65 | 17 | 6 | 3 | 3 | 8 |
| Long Beach, Calif. | 96 | 63 | 23 | 7 | 2 | 1 | 21 |
| Los Angeles, Calif. | U | U | U | U | U | U | U |
| Pasadena, Calif. | 37 | 32 | 4 | - | 1 | - | 5 |
| Portland, Oreg. | 148 | 108 | 16 | 11 | 6 | 7 | 14 |
| Sacramento, Calif. | U | U | U | U | U | U | U |
| San Diego, Calif. | 154 | 100 | 20 | 23 | 5 | 6 | 25 |
| San Francisco, Calif. | 154 | 94 | 29 | 27 | 1 | 3 | 19 |
| San Jose, Calif. | 237 | 168 | 47 | 16 | 3 | 3 | 26 |
| Santa Cruz, Calif. | 34 | 26 | 4 | 2 | 2 | - | 2 |
| Seattle, Wash. | 130 | 77 | 29 | 18 | 4 | 2 | 6 |
| Spokane, Wash. | 51 | 33 | 13 | 4 | - | 1 | 3 |
| Tacoma, Wash. | 90 | 69 | 10 | 7 | 1 | 3 | 9 |
| TOTAL | 12,437¶ | 8,408 | 2,326 | 1,091 | 306 | 295 | 935 |

*Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

†Pneumonia and influenza.

§Because of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

¶Total includes unknown ages.

U: Unavailable -: no reported cases

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